FIG. 1

OLD STATE NEW STATE

PATH METRIC s=A+xSTATE Sn

PATH METRIC xPATH METRIC A

PATH SELECT SIGNAL

PS[S2n]

WHEN  $a \ge b$  PS[S2n] = 1

WHEN  $a \le b$  PS[S2n] = 0

STATE Sn+2

PATH METRIC b=B+yBRANCH METRIC y

FIG. 2

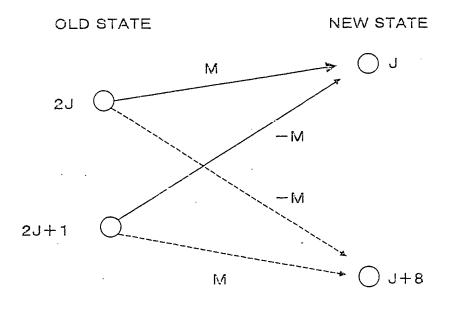


FIG. 3

	<u></u> .	
J	B(J, 0)	B(J, 1)
0	1	1
1	_≗ — 1	- 1
2	1	1
3	-1	1
4	1	1
5	<del>-</del> 1	1
6	1	1
7	<b>—1</b>	1

A=OLD\_M(2J)+T//OLD\_(2J+1)+ B=OLD\_M(2J)-T//OLD\_(2J+1)+  $NEW_M(J+B) = MAX(B_HIGH, B_LC)$  TRN < < 1, TRN(0, 0) = TCNEW\_M(J)=MAX(A\_HIGH, A\_LOW TRN<<1, TRN(0, 0)=TC \*AR5+, B A, \*AR4+ CMPS B, \*AR3+ \* AR5, A DSADT CMPS DADST VITRFE MACRO

ENDM.

: A=OLD\_M(2J)-T//OLD\_(2J+1)-: B=OLD\_M(2J)+T//OLD\_(2J+1)-: NEW\_M(J)=MAX(A\_HIGH, A\_LOW : TRN<<1, TRN(0, 0)=TC : NEW\_M(J+8)=MAX(B\_HIGH, B\_LC : TRN<<1, TRN(0, 0)=TC \*AR5+, B A, \*AR4+ CMPS B, \*AR3+ \* ARS, A DSADT DADST CMPS VITRFE MACRO

LOW

ENDM.

FIG. 5

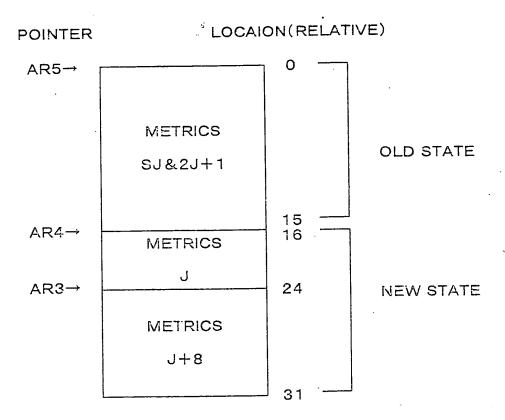


FIG. 6

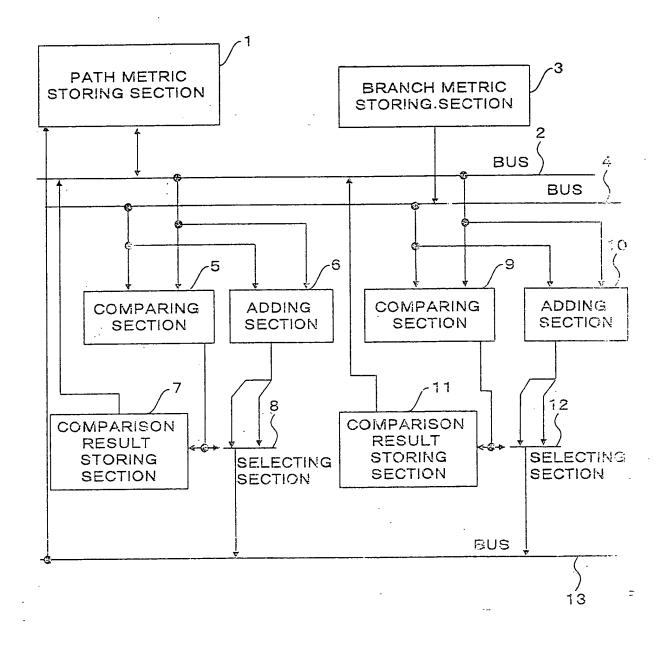
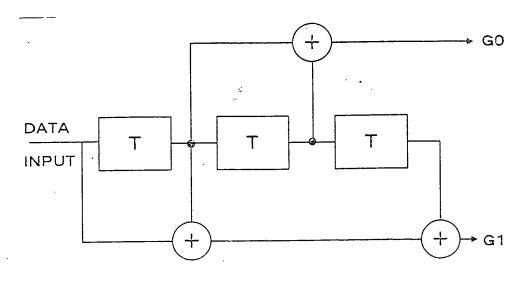


FIG. 7



T: DELAY

## G0G1

BM0: BRANCH METRIC WITH 0 0
BM1: BRANCH METRIC WITH 0 1
BM2: BRANCH METRIC WITH 1 0
BM3: BRANCH METRIC WITH 1 1

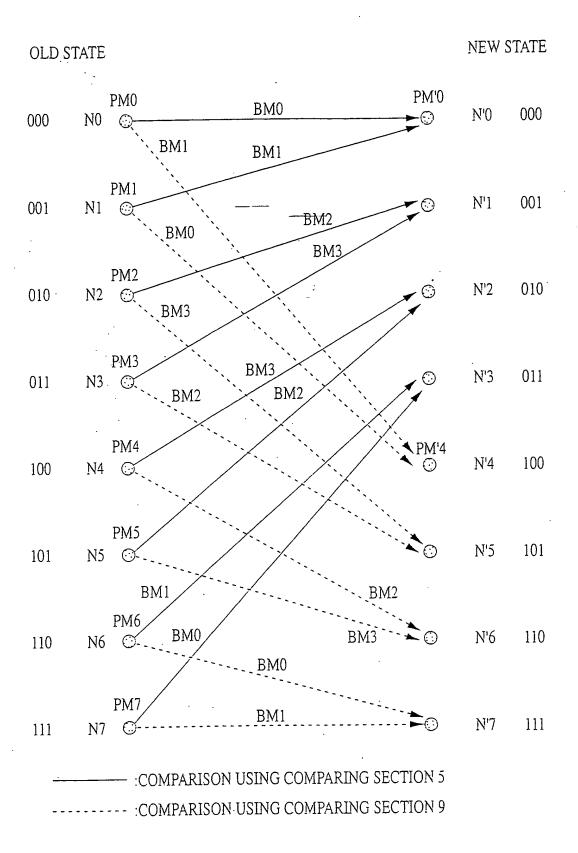


FIG. 8

FIG. 9

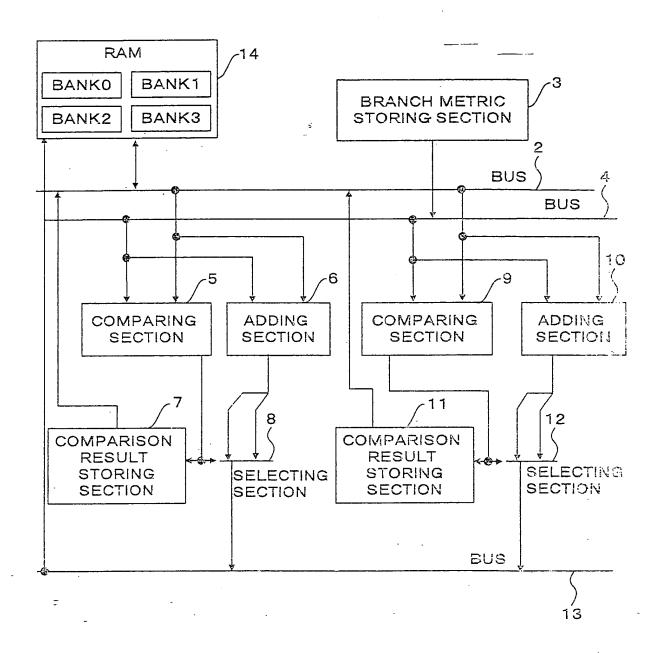


FIG. 10

INSTR- MEMORY OPERATION UCTION ACCESS EXECUTION

STAGE

OPERATION EXECUTION

MEMORY ACCESS

INSTR-UCTION COMMENT

INSTRUCTION 2

INSTRUCTION 3

FIG. 11

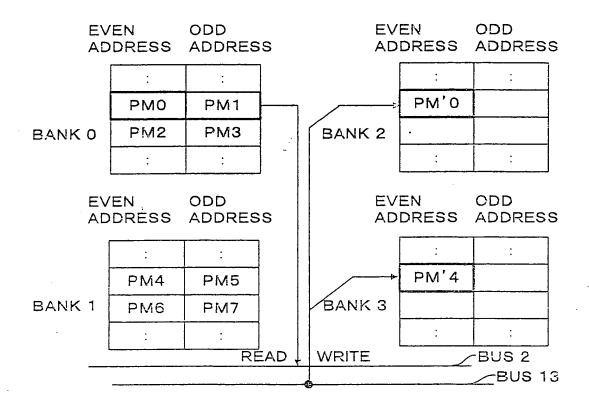


FIG. 12

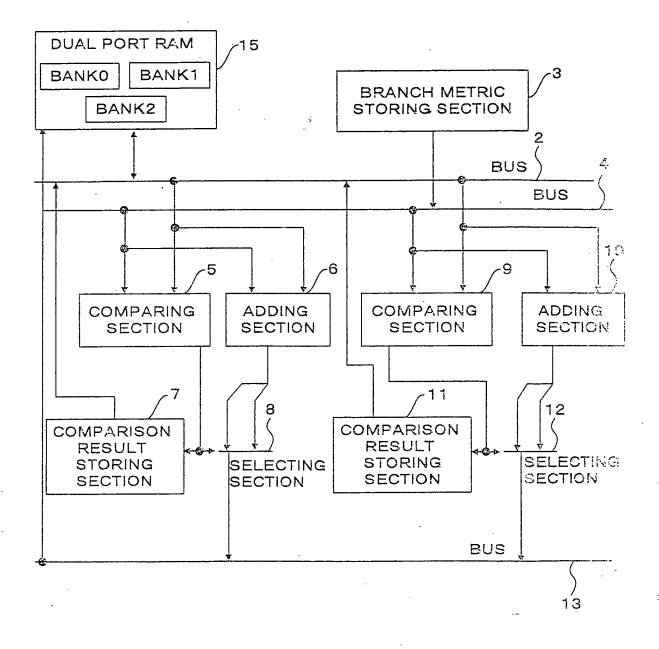


FIG. 13

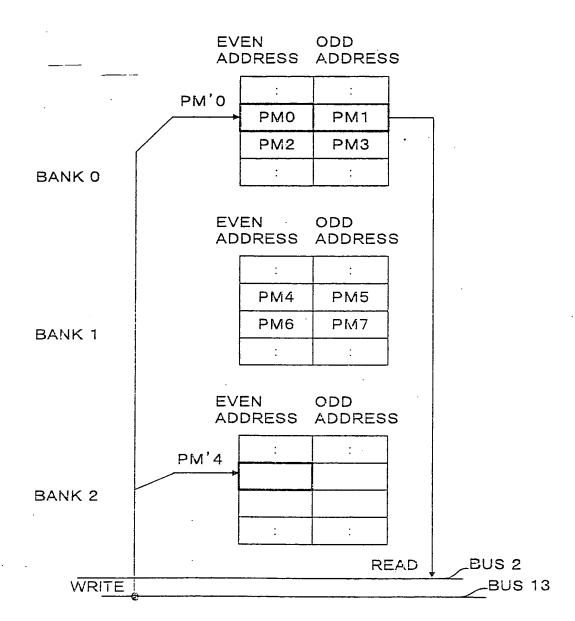
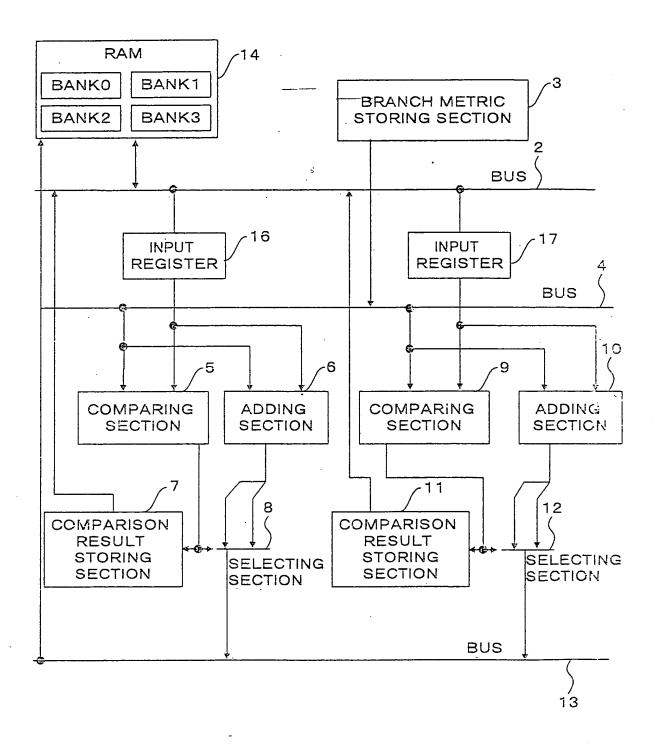


FIG. 14



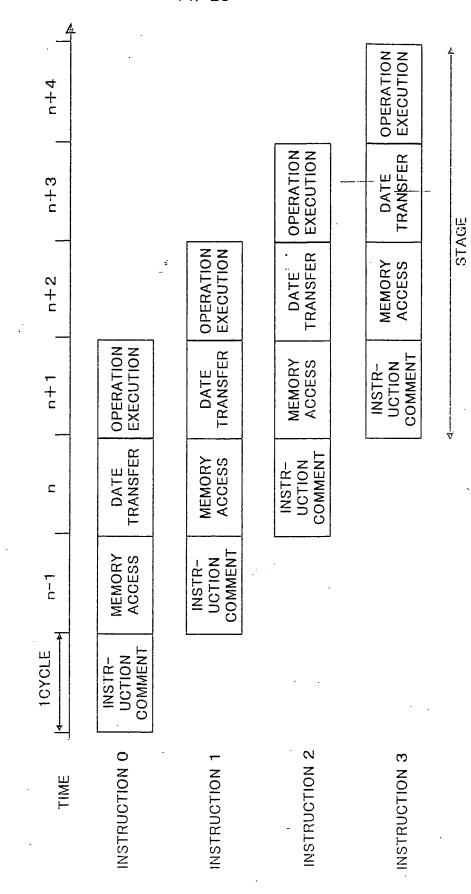
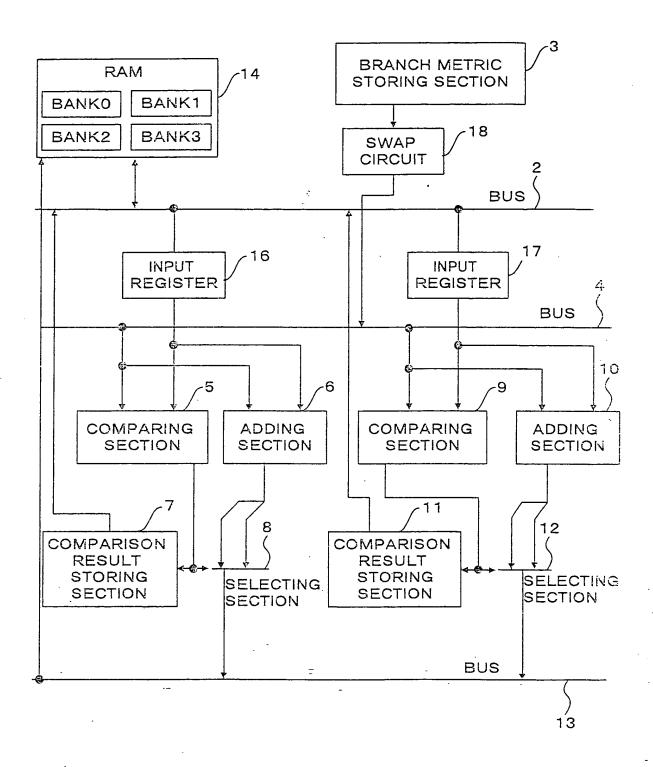


FIG. 15

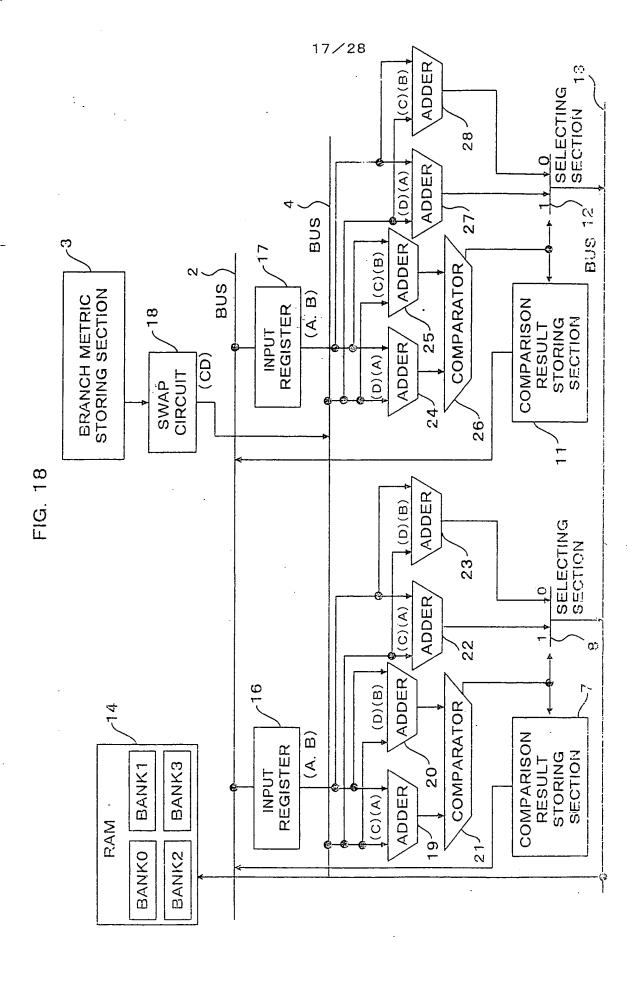
FIG. 16

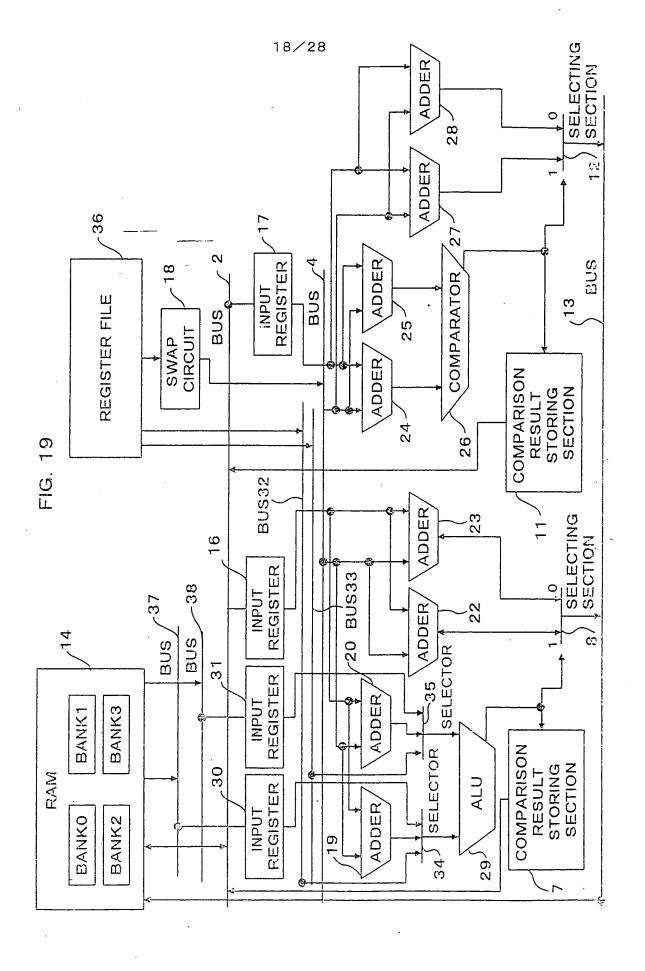


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	COMPARING MEANS 5	COMPARING MEANS 9
NODE NO, NODE N1→NODE N'0	PM1+BM1-PM0-BM0	
NODE NO, NODE N1→NODE N'4		PM1+BM0-PM0-BM1
NODE N6, NODE N7→NODE N'3	PM7+BM0-PM6-BM1	
NODE N6, NODE N7→NODE N'7	-	PM7+BM1-PM6-BM0
-		

	COMPARING MEANS 6	COMPARING MEANS 10
NODE NO, NODE N1→NODE N'0	PM1+BM1, PM0+BM0	1
NODE NO, NODE N1→NODE N'4		PM1+BM0, PM0+BM1
NODE №6, NODE N7→NODE N'3	PM7+BM0、PM6+BM1	l
NODE N6, NODE N7→NODE N'7		PM7+BM1, PM6+BM0





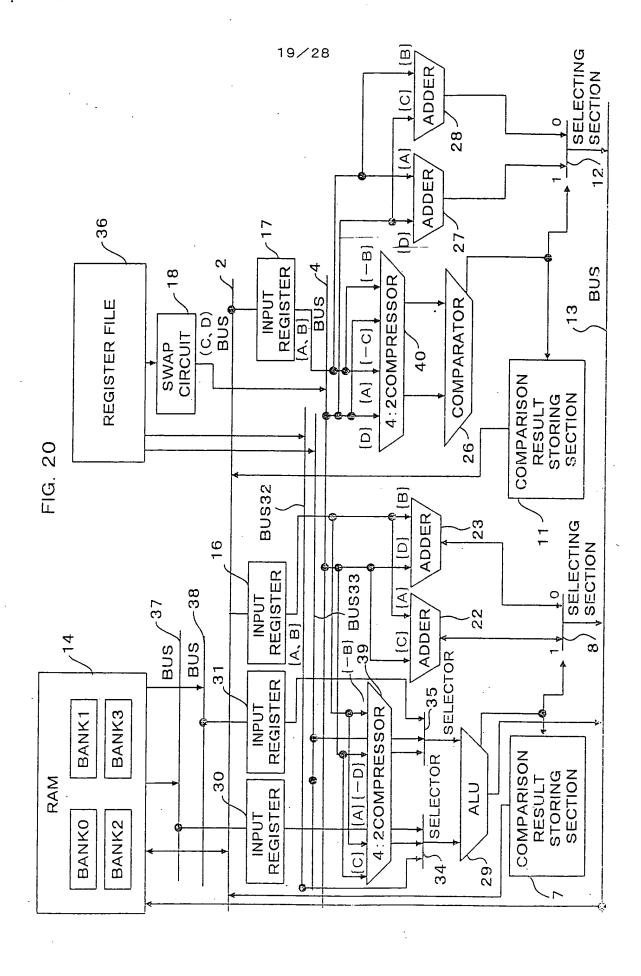


FIG. 21

		NPUT	-		OL	JTPUT	
in0	in 1	in2	in3	0in	out0	out1	Oout
00000011111111000000011111111	0000111100001111000011111	0011001100110011001100110011	01010101010101010101010101	00000000000001111111111111111	0110100110110100110011011001	0001011101111111111111111111	0000000000001000001000111

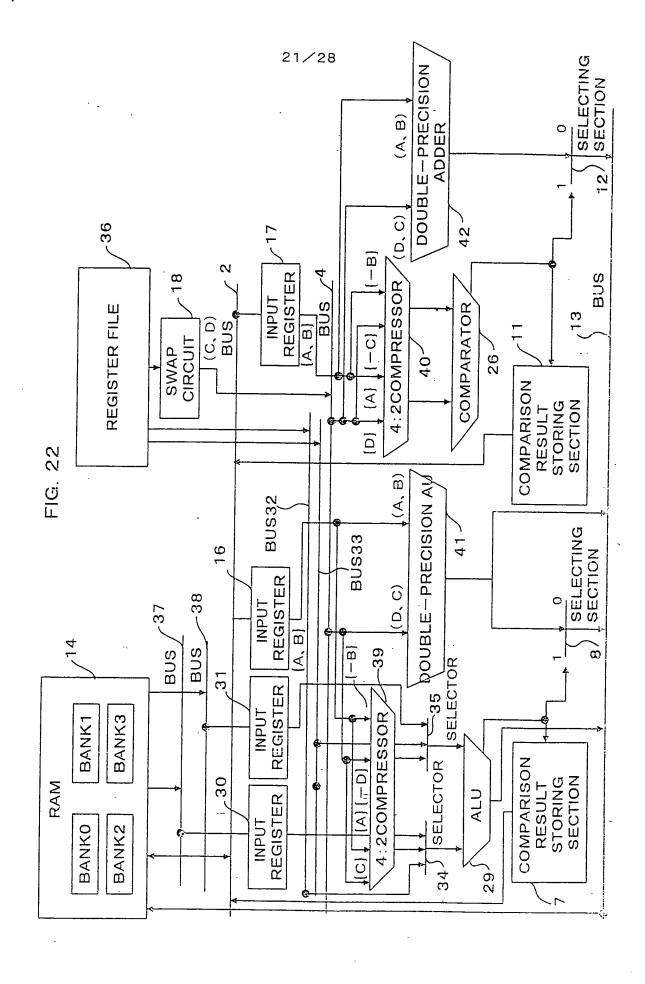
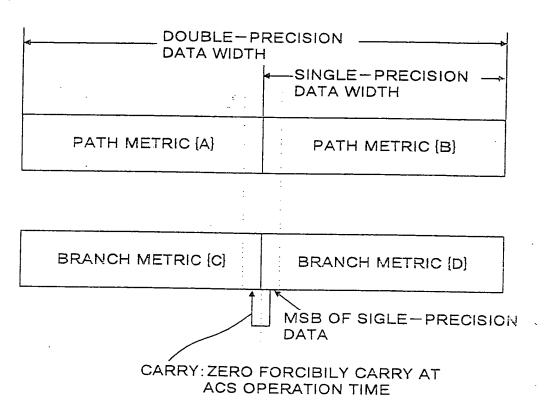


FIG. 23



## RESULT OF ADDITION

PATH METRIC (A+C)	PATH METRIC (B+D)

